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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/673,777	09/29/2003	Volkert A. Zeijlemaker	P0010499.00	2479
27581 7590 12/23/2008 MEDTRONIC, INC. 710 MEDTRONIC PARKWAY NE MINNEAPOLIS, MN 55432-9924				
EXAMINER				
RAMIREZ, JOHN FERNANDO				
ART UNIT		PAPER NUMBER		
3737				
MAIL DATE		DELIVERY MODE		
12/23/2008		PAPER		

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

### Office Action Summary

**Application No.**

10/673,777

**Applicant(s)**

ZEIJLEMAKER ET AL.

**Examiner**

JOHN F. RAMIREZ

**Art Unit**

3737

**Period for Reply** -- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 08 September 2008.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☐ Claim(s) \_\_\_\_\_ is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-11, 19-20 and 26-35 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-8508)  
Paper No(s)/Mail Date \_\_\_\_\_
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: \_\_\_\_\_

## DETAILED ACTION

### ***Continued Examination Under 37 CFR 1.114***

A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 09/08/08 has been entered.

### ***Response to Arguments***

Applicant's arguments filed on 09/08/08 have been fully considered but they are not persuasive. Applicant alleges on pages 8 and 9 of the remarks in relation to claims 1-11 and 26, that the Foster et al. patent does not teach "a receiver to received information from an implantable medical device(IMD)", and does not teach "a control unit to coordinate the application of the electromagnetic radiation bursts based on the information". These observations are respectfully traversed.

In response to applicant's arguments that the references fail to show certain features of applicant's invention, it is noted that the features upon which applicant relies (i.e., a receiver, a control unit) are not recited in the rejected claim(s). Although the claims are interpreted in light of the specification, limitations from the specification are not read into the claims. See *In re Van Geuns*, 988 F.2d 1181, 26 USPQ2d 1057 (Fed. Cir. 1993).

Applicant further states that the Foster et al. reference does not teach, "the information defines a timing of stimulation pulses applied to the patient by the IMD". As claims 1 and 26 are currently written (see preamble), the timing information is related to operational conditions of the IMD. Therefore, the Foster et al. reference teaches this limitation as described in the rejection in col. 7, lines 5-40; col. 7, lines 49-67; and col. 8 lines 1-10. Based on the above observations, the rejections are maintained and repeated below.

***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

**Claim 1, 4, 8-10, 26-28 and 31-35 are rejected under 35 U.S.C. 103(a) as being unpatentable over Foster et al. (US 6,925,328) in view of Paul et al. (5,697,958).**

Foster et al. discloses a magnetic resonance imaging (MRI) device comprising: a magnet to generate a magnetic field (col. 1, lines 24-41); an electromagnetic radiation source to apply MRI electromagnetic radiation bursts (col. 1, lines 24-41) to the patient; an imaging unit to generate images of patient following application of radiation bursts (col. 8, lines 37-55); a receiver to receive information from an implantable medical

device (IMD) (abstract); and a control unit to coordinate application of the electromagnetic radiation bursts based on the information (see Figure 5), the information defines a timing of stimulation pulses applied to a patient with the IMD, in which the received information defines a timing of the stimulation applied to the patient by the IMD (see col. 7, lines 5-40; col. 7, lines 49-67; and col. 8 lines 1-10). Foster et al. disclose that the IMD can include an implantable pacemaker connected to the heart for furnishing electrical impulses to the heart (see abstract, see claim 22). The implantable cardioverter/defibrillator pacemaker inherently includes application to trigger an arrhythmia (col. 12, lines 24-43; col. 11, lines 22-30). The MRI sends out signals that are detected by the IMD and the signals are evaluated to determine whether or not to disable portions of the IMD. MRI inherently includes application of gradient magnetic fields. An operator who sets in the image sequence data into the MRI system controller or the microprocessor of the IMD can comprise the programmer which disables portions of the IMD.

Foster et al. disclose timing of the IMD with the MRI system (col. 10- lines 26-67). by the IMD (col. 7, lines 5- 67). Foster et al. does not explicitly teach an implantable medical device (IMD) having a telemetry unit that communicates timing information as to operational conditions of the IMD. In the same field of endeavor, Paul et al. discloses an implantable medical device with a telemetry antenna that receives information from a microprocessor and a timing circuitry to provide timing signals necessary to the operation of the device and transmit such information over outside the patient concerning the operational conditions of the device (see abstract, figs. 1 and 2, col. 5,

lines 9-35). Based on the above observations, for a person of ordinary skill in the art, modifying the method disclosed by Foster et al., with the above discussed enhancements would have been considered obvious because such modifications would provide better noise identification for the proper response of an IMD to avoid malfunction.

***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

**Claims 2, 3, 7 and 11 are rejected under 35 U.S.C. 103(a) as being unpatentable over Foster et al. (US 6,925,328) in view of Greatbatch (US 2003/0109901).**

Foster et al. teaches all the limitations of the claimed subject matter as applied in claim 1, except for mentioning specifically a pacemaker which collects information of a cardiac cycle, and the received information includes an indication of sensed cardiac activity and physiologic conditions measured by the IMD, an indication of one or more stimulations applied by the IMD.

However, a pacemaker which collects information of a cardiac cycle, and the received information includes an indication of sensed conditions measured by the IMD,

an indication of one or more stimulations applied by the IMD is considered conventional in the art by the teachings of Greatbatch (see Abstract and Figure 1).

Based on the above observations, for a person of ordinary skill in the art, modifying the method disclosed by Foster et al., with the above discussed enhancements would have been considered obvious because such modifications would have provided a stand-alone cardiac stimulating and monitoring system during MRI scanning without operational disruption and without physiological injury to the patient's heart.

#### ***Allowable Subject Matter***

Claims 5-6, 29-30 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

#### ***Conclusion***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to JOHN F. RAMIREZ whose telephone number is (571)272-8685. The examiner can normally be reached on (Mon-Fri) 7:00 - 3:30 p.m.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Brian L. Casler can be reached on (571) 272-4956. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/J. F. R./  
Examiner, Art Unit 3737

/Long V Le/  
Supervisory Patent Examiner, Art Unit 3768